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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,137	05/15/2001	Eberhard Lipp	1746-6	1743
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Harrison & Egbert 412 Main Street, 7th Floor Houston, TX 77002				
			EXAMINER COOLEY, CHARLES E	
			ART UNIT 1723	PAPER NUMBER

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,137

Applicant(s)

LIPP, EBERHARD

Examiner

Charles E. Cooley

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27 and 37-39 is/are rejected.
- 7) ☒ Claim(s) 28-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 FEB 2004 has been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119, which papers have been placed of record in the file.

Drawings

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 28 APR 2003 have been approved by the examiner.

Specification

4. The title of the invention and abstract are acceptable.

5. The disclosure is objected to because of the following informalities:

Figures 4 and 5 were cancelled by the last amendment, yet the "Detailed Description of the Invention" section of the specification still describes these figures.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. The specification is objected to under 35 U.S.C. § 112, first paragraph, as the specification, as originally filed, does not provide support for the invention as is now claimed and failing to adequately teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure.

Newly presented claim 37 is rejected under 35 U.S.C. 112, first paragraph, because the specification does not provide enablement for the recited "mixing spiral means for rotating said first and second spiral-shaped mixing blades". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims because it is unclear how "mixing spiral means" itself can possibly provide the function of rotating the first and second blades which are part of the mixing spiral means. This function is attributed to the axle. This claim is not supported by an enabling disclosure because the person skilled in the art would not know how to make

or use the invention without a description of elements to perform the function (MPEP 2185).

35 U.S.C. 112, ¶6 states that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function, without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

While 35 U.S.C. 112, ¶6 permits a particular form of claim limitation, it cannot be read as creating an exception either to the description, enablement or best mode requirements of the first paragraph or the definiteness requirement of the second paragraph of 35 U.S.C. 112. *In re Knowlton*, 481 F.2d 1357, 178 USPQ 486 (CCPA 1973).

The specification is devoid of the corresponding structure which perform the function recited in claim 37. The instant specification does not set forth the structure corresponding to the means-plus-function claim limitations in claim 22. In *B. Braun Medical, Inc. v. Abbott Lab.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997) the Federal Circuit stated that “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the *quid pro quo* for the convenience of employing Section 112, Para. 6.” Since no corresponding structure has been linked to the function in the means-plus-function limitation of claim 37, the specification does not provide

enablement for the recited "mixing spiral means for rotating said first and second spiral-shaped mixing blades".

Claim 37 is rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

8. Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since no corresponding structure has been linked to the function in the means-plus-function limitation of claim 37 as explained above, the claim is indefinite. *In re Dosse/*, 115 F.3d 942, 946, 42 USPQ2d 1881, 1884 (Fed. Cir. 1997) and see MPEP 2185.

Furthermore, claim 37 is considered drawn to nonelected species B: Figures 4-5 (now cancelled). The disclosure drawn to the elected species (Figures 1-3) is considered enabling for a shearing head but not for a counter head which rotates in a different direction. The counter head is only described and shown with regard to the nonelected embodiment of now cancelled Figures 4 and 5. Claim 37 will be treated on the merits for completeness. However, unless Applicant can provide compelling evidence that the counter head is necessarily enabled by the elected embodiment, the examiner reserves the right to withdrawn claim 37 from further consideration in the next office action and for purposes of appeal (MPEP 821). Note the claims originally presented and acted upon by the PTO determine the invention elected by applicant in this RCE application (MPEP 818.02(a)).

Claim 37: the different rotational speeds are referring to the speeds of what elements?

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 27, 37, 38, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 93/19842.

WO 93/19842 discloses a machine in Figures 1-2 comprising a housing 2 having an interior volume; a rotatable axle 9 extending vertically within said housing; a mixing spiral means 8 affixed to said axle and including a first spiral-shaped mixing blade (one of elements 12) affixed to said axle in a first position along a longitudinal axis of said axle and extending radially outwardly therefrom and a second spiral-shaped mixing blade (an adjacent one of elements 12) affixed to said axle in a second position along the longitudinal axis of said axle and extending radially outwardly therefrom, said first position being separated from said second position by a transition zone as seen in Figure 1; said transition zone being passable directly therethrough from said first position to said second position; a counter head 14, 15 on the axle; a shearing head 16 affixed to a lower end of said second spiral-shaped mixing blade (the lowermost element 12), said shearing head 16 being aligned with said axle.

11. Claim 27 is rejected under 35 U.S.C. 102(b) as being anticipated by Marshall (US 3,675,902).

The patent to Marshall discloses a machine in Figures 1-2 comprising a housing 10 having an interior volume; a rotatable axle 22 extending vertically within said housing; a mixing spiral means affixed to said axle and including a first spiral-shaped mixing blade 18 affixed to said axle in a first position along a longitudinal axis of said axle and extending radially outwardly therefrom and a second spiral-shaped mixing blade 18 affixed to said axle in a second position along the longitudinal axis of said axle and extending radially outwardly therefrom, said first position being separated from said second position by a transition zone 26 as seen in Figure 1; said transition zone being passable directly therethrough from said first position to said second position as seen in Figure 2 as element 28 merely occupies a small extent of the annular region between the upper and lower blades 18 and therefore having large empty zones between the blades 18 which are passable directly therethrough from said first position to said second position.

12. Claim 27 is rejected under 35 U.S.C. 102(b) as being anticipated by DE 3901552 A1.

DE 3901552 A1 discloses a machine in the Figures comprising a housing 1 or 12 having an interior volume; a rotatable axle 8 extending vertically within said housing; a mixing spiral means affixed to said axle and including a first spiral-shaped mixing blade 6 affixed to said axle in a first position along a longitudinal axis of said axle and extending radially outwardly therefrom and a second spiral-shaped mixing blade

(proximate 10) affixed to said axle in a second position along the longitudinal axis of said axle and extending radially outwardly therefrom, said first position being separated from said second position by a transition zone (proximate 8) as seen in Figures 1 and 4; said transition zone being passable directly therethrough from said first position to said second position as seen in Figures 1 and 4.

Allowable Subject Matter

13. Claims 28-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach or fairly suggest the configuration of the blade elements set forth in claim 28 in combination with the subject matter of claim 27.

Response to Arguments

15. Applicant's arguments filed 9 FEB 2004 have been fully considered but they are not persuasive.

16. Applicant's arguments with respect to claims 27, 37, 38, and 39 have been considered but are moot in view of the new ground(s) of rejection.

Applicant asserts that the baffle member 28 fills the transition zone between the two spirals but a casual inspection of Fig. 2 of the Marshall patent reveals the baffle member only occupies a small part of the annular region between the two spirals.

Consequently, Fig. 2 shows at least two large zones which are passable directly therethrough from the first position to the second position which is all that claim 27 requires.

Nevertheless, the newly applied prior art to WO 93/19842 and DE 3901552 A1 clearly show axially spaced spiral blades with empty zones therebetween.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art shows axially spaced spiral blade elements attached to an axle.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles E. Cooley
Primary Examiner
Art Unit 1723

2 March 2004